

CLAIMS

1. A method for administering a mental competency test, comprising the steps of:
generating a plurality of multiple-choice variant questions, each variant question having multiple variants;
defining a plurality of versions of said mental competency test, each version containing a respective unique set of variants of said plurality of variant questions, each version containing no more than one variant of each respective variant question, wherein no two of said respective unique sets of variants are identical; and
administering each of said plurality of versions of said mental competency test to a respective set of one or more test subjects.
2. The method of administering a mental competency test of claim 1, further comprising the steps of:
receiving test responses from a plurality of test subjects; and
analyzing said test responses to detect a pattern of probable unauthorized access to a version of said mental competency test different from the version to which the test responses pertain.
3. The method of administering a mental competency test of claim 1, wherein at least some of said variant questions comprise, for each respective variant question, a question portion which is identical in all variants of the respective variant question, and a plurality of answer portions corresponding to respective variants, the answer portions being different for each variant.
4. The method of administering a mental competency test of claim 3, wherein each of said plurality of answer portions for a respective variant question contains an incorrect answer which is confusingly similar to a correct answer contained in a different one of said plurality of answer portions.

1 5. The method of administering a mental competency test of claim 3, wherein each
2 of said plurality of answer portions for a respective variant question contains a different
3 correct answer and a set of incorrect answers, the set of incorrect answers being the same
4 for all variants of the respective variant question.

1 6. The method of administering a mental competency test of claim 1, wherein at
2 least some of said variant questions comprise, for each respective variant question, a
3 plurality of question portions corresponding to respective variants, the question portions
4 being different for each variant, and a common answer portion, wherein the correct
5 answer is different for each variant.

1 7. The method of administering a mental competency test of claim 1, wherein said
2 step of administering each of said plurality of versions of said mental competency test to
3 a respective set of one or more test subjects comprises administering said test to at least
4 some of said test subjects using an interactive computer terminal.

1 8. The method of administering a mental competency test of claim 7,
2 wherein said step of administering said test comprises adaptively administering
3 said test on an interactive computer terminal while monitoring responses of each test
4 subject for a pattern of probable unauthorized access to a version of said mental
5 competency test different from the version being administered to the test subject, and
6 interrogating the subject with at least one reserve variant question if the monitoring step
7 detects said pattern of probable unauthorized access.

1 9. The method of administering a mental competency test of claim 1, wherein said
2 step of defining a plurality of versions comprises automatically selecting each respective
3 unique set of variants of said plurality of variant questions, said automatically selecting
4 step being performed by a digital computing device.

10. The method of administering a mental competency test of claim 1, further comprising the steps of:

defining a plurality of discrete subsets of said plurality of variant questions, each said discrete subset containing an identical number of said variant questions, said identical number being greater than 1; and

defining, for each respective subset of said plurality of discrete subsets of said plurality of variant questions, a corresponding plurality of discrete subsets of variants, each discrete subset of variants containing one variant of each respective variant question of the respective discrete subset of said plurality of variant questions;

wherein said step of defining a plurality of versions of said mental competency test comprises defining, for each respective version, a corresponding unique set of said discrete subsets of variants.

11. A mental competency test administration apparatus embodied in one or more digital data processing systems, comprising:

a data storage containing a plurality of versions of said mental competency test, each version containing a respective unique set of variants of a plurality of multiple-choice variant questions, each variant question having multiple variants, each version containing no more than one variant of each respective variant question, wherein no two of said respective unique sets of variants are identical; and

a suspicious pattern analyzer which analyzes responses to said mental competency tests from a plurality of test subjects to detect patterns of probable unauthorized access to a version of said mental competency test different from the version to which the test subject responds.

12. The mental competency test administration apparatus of claim 11, wherein said data storage contains a first database of said multiple-choice variant questions, and a second database of versions, said second database identifying, for each respective version, the corresponding unique set of variants contained in the respective version.

1 13. The mental competency test administration apparatus of claim 11, wherein at least
2 some of said variant questions comprise, for each respective variant question, a question
3 portion which is identical in all variants of the respective variant question, and a plurality
4 of answer portions corresponding to respective variants, the answer portions being
5 different for each variant.

1 14. The mental competency test administration apparatus of claim 13, wherein each of
2 said plurality of answer portions for a respective variant question contains an incorrect
3 answer which is confusingly similar to a correct answer contained in a different one of
4 said plurality of answer portions.

1 15. The mental competency test administration apparatus of claim 13, wherein each of
2 said plurality of answer portions for a respective variant question contains a different
3 correct answer and a set of incorrect answers, the set of incorrect answers being the same
4 for all variants of the respective variant question.

1 16. The mental competency test administration apparatus of claim 11, wherein at least
2 some of said variant questions comprise, for each respective variant question, a plurality
3 of question portions corresponding to respective variants, the question portions being
4 different for each variant, and a common answer portion, wherein the correct answer is
5 different for each variant.

1 17. The mental competency test administration apparatus of claim 11, wherein:
2 said data storage contains a plurality of discrete subsets of said plurality of variant
3 questions, each said discrete subset containing an identical number of said variant
4 questions, said identical number being greater than 1;
5 said data storage further contains, for each respective subset of said plurality of
6 discrete subsets of said plurality of variant questions, a corresponding plurality of discrete
7 subsets of variants, each discrete subset of variants containing one variant of each
8 respective variant question of the respective discrete subset of said plurality of variant
9 questions; and
10 each version of said plurality of versions of said mental competency test
11 comprises a corresponding unique set of said discrete subsets of variants.